Development Services Department
77 Fair Dr
Costa Mesa, CA 92626

Building Division
T: (714) 754-5273
Mon-Fri 8:00 a.m to 5:00 p.m.

RESIDENTIAL BATHROOM REMODEL

Bathroom remodels require compliance with the following Codes: **(Must Be On Plans)**

- ✓ **2016 California Residential Code (CRC)**
- ✓ **2016 California Electrical Code (CEC)**
- ✓ **2016 California Plumbing Code (CPC)**
- ✓ **2016 California Energy Code (CEnC)**
- ✓ **2016 California Green Code (CalGreen)**
- ✓ **2016 California Mechanical Code (CMC)**

REQUIREMENTS FOR PERMIT SUBMITTAL

Before approval and issuance of a building permit, applicant shall submit four (4) sets of plans (minimum size 11"x 17"), which are drawn to scale (minimum 1/4":1 ft.), readable, legible, and include the following information:

☐ Title Sheet including the following:
- ✓ Project address; and Owner contact information;
- ✓ Contact information of the person preparing the plans,
- ✓ Sheet index,
- ✓ Scope of work statement;
- ✓ Building data like Occupancy, type of construction, stories, square footage, and sprinkler.
- ✓ Vicinity map

☐ Site Plan/ Plot plan specify the lot dimensions and distances from the building to property lines and projections. (**For addition only)**

☐ Existing Floor Plan for a floor/story where the remodeled bathroom is located. Specify the existing use of all rooms and areas.

☐ Proposed Bathroom Floor Plan showing type and location of proposed interior cabinetry, countertops, plumbing fixtures, etc. Include construction legend identifying and describing new work and clearly showing the difference between the existing and proposed conditions.

☐ Electrical Plan, Lighting / Reflected Ceiling Plan (may be combined with floor plan)

☐ Construction details for any new/reframed interior walls, interior/exterior openings, etc.

MINIMUM REQUIREMENTS FOR BATHROOM ELECTRICAL, MECHANICAL AND PLUMBING SYSTEMS

ELECTRICAL

☐ At least one receptacle outlet shall be installed in bathroom within 3'-0" from basin. At least one 20-ampere branch circuit shall be provided to supply bathroom receptacle outlet(s). Bathroom outlets shall have GFCI protection. [CEC 210.52(D), 210.11(C)(3) & 210.8(A)(1)]

☐ All 125volt, 15-ampere and 20-ampere receptacles shall be listed tamper resistant. [CEC 406.12]

☐ Both new and modified branch wiring circuits shall have Arc-fault circuit protection for 120-volt, single phase, 15 and 20- ampere branch circuits supplying outlets in dwellings. [CEC 210.12(A)]

☐ No part of a hanging fixture is allowed closer than 8 feet above the tub rim or 3 feet horizontally from the tub rim, unless light fixture(s) in shower enclosure area is listed for damp areas or listed for wet locations. [CEC 410.10(D)]

☐ All installed luminaires shall be high efficacy; either listed by source type **or** by being JA8-2016 certified and labeled. [CEnC 150.0(k)1A]

☐ A minimum of one luminaire shall be installed in each bathroom controlled by a vacancy sensor.

☐ Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C. Only JA8-2016-E certified and marked light source, rated for elevated temperature, must be installed by final inspection. [CEnC 150(k)1C]

☐ All exhaust fans shall be switched separately from lighting systems. [CEnC 150(k)2B]

☐ For occupancies with a horizontal rated separation (floor/ceiling assembly), the recessed fixtures must be protected to the rating of the separation (1 hour) or be listed to the required protection. This generally applied to residential condominium construction where units are above or below other units.

MECHANICAL

☐ Bath and toilet rooms shall have an exhaust rate of 50 cfm intermittent or 25 cfm continuous. [CMC Table 403.7]

☐ Each bathroom, or room containing a bathtub, shower, or tub shower combination, shall be mechanically ventilated. Unless functioning as a part of a whole house ventilation system, fans must be controlled by a humidity control capable of adjustment between a relative humidity range of ≤ 50 percent to a maximum of 80 percent. The control may utilize manual or automatic means of adjustment. The control may be a separate component or integral to the exhaust fan. [CMC 402.5, CalGreen 4.506]

☐ Bath and toilet room windows shall not be less than 3 square feet, one half of which must be operable. [CRC R303.3]

☐ A bath exhaust fan, with back draft damper and humidity control, is required regardless of the presence of a window (room containing a bathtub, shower, spa or other similar source of moisture). [CRC R303.3]

☐ Exhaust must vent to outdoor in an approved duct. Terminate the outlet a minimum of 3 feet from an opening or property line. [CMC 502.2.1]

☐ Mechanical and gravity outdoor air intake openings shall be located a minimum of 10 feet from any plumbing vents and such opening shall be located a minimum of 3 feet below the contaminant source. [CRC R303.5.1 & exc 1]

☐ Show fan/duct/vent termination locations. Indicate that fan and duct openings (environmental air ducts) shall terminate at least three (3) feet from property lines or openings into the building with back draft damper. Plumbing vents within ten (10) feet of operable skylights shall extend a minimum of three (3) feet above such openings. [CMC 504.1, 504.5, CPC 906.2]

PLUMBING

☐ Bathrooms, toilet rooms, and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches. [CRC R305.1]

☐ Provide safety glazing in walls enclosing tubs/showers where the bottom exposed edge of the glazing is less than

60" above a standing surface and drain inlet. [CRC R308.4.5]

- ☐ Showers and tub shower combinations shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance and thermostatic types that provide scald and thermal shock protection. [CPC 408.3]
- ☐ Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface (e.g., ceramic tile or fiberglass) over a moisture resistant underlayment (e.g., cement, fiber cement, or glass mat gypsum backer) extending to a height of not less than 6 feet above the drain inlet. Water-resistant gypsum backing board shall not be used over a vapor retarder in shower or bathtub compartments. [R702.3.7, R307.2]
- ☐ Control valves and showerheads shall be located on the sidewall of shower compartments, arranged so that the showerhead does not discharge directly at the entrance to the compartment so that the bather can adjust the valves prior to stepping into the shower spray. [CPC 408.9]
- ☐ A minimum 12"x12" access panel is required when a slip joint p-trap waste & overflow is provided. [CPC 402.10]
- ☐ *When additional water closets (toilets) are installed, a maximum of 3 water closets are allowed on a 3" waste line.[CPC Table 703.2]*
- ☐ The hot water control shall be installed on the left side of lavatory faucet. [CPC 417.5]
- ☐ **Fixture water consumption**:
  - ✓ Residential lavatory faucets shall not have a flow rate of greater than 1.2 gpm and Kitchen faucets 1.8 gpm at 60 psi. [CPC 407.2.1]
  - ✓ Water closets, flush tank, flushometer tank, or flushometer valve operated, shall have an average consumption of not more than 1.28 gallons of water per flush for both single and dual flush toilets effective July 1, 2011. [CPC 411.2]
  - ✓ Showerheads shall have a maximum flow rate of 2.0 gpm at 80 psi. [CPC 408.2]
- ☐ **Plumbing fixture clearances** for fixtures that are not required to conform to accessibility codes:
  - ✓ Water closets shall not be set closer than 15" from its center to any side wall or obstruction and 30" from center to center of any similar fixture. Provide 24" minimum clear space in front of fixture. [CPC 402.5]
  - ✓ The finished floor slope at shower receptor is min. ¼" and max. ½" per foot. [CPC 408.5]
  - ✓ In no case shall any shower receptor threshold be less than two (2) inches or exceeding nine (9) inches in depth when measured from the top of the threshold to the top of the drain. [CPC 408.5]
  - ✓ New shower compartments shall have a finished interior of 1,024 square inches (7.1 square feet) and shall be capable of encompassing a 30 inch circle. The clearance shall be maintained up to 70 inches of height above shower drain. Shower door to be tempered, and provide a min 22" clear unobstructed opening. [CPC 408.6]
  - ✓ Plumbing fixtures and fixture fittings for persons with disabilities shall conform to CBC Chapters 11A or 11B for specific accessibly codes. [CBC 11A or 11B, 408.6]
- ☐ Where a fixture is installed on a floor level that is lower than the next upstream manhole cover of the public or private sewer (at basement), serving such drainage piping, shall be protected from backflow of sewage by installing an approved type of backwater valve per [CPC 710.1]
- ☐ Drainage piping serving fixtures that are located below the crown level of the main sewer (at basement) shall discharge into an approved water-tight sump or receiving tank, so located as to receive the sewage or wastes by gravity. [CPC 710.2]

WHIRLPOOL/ SPA TUBS

- ☐ Whirlpool (Spa) bathtubs shall have a readily accessible access panel. [CPC 409.6]
- ☐ The Circulation pump shall be located above the crown weir of the trap. [CPC 409.6]
- ☐ The pump and the circulation piping shall be self-draining to minimize water retention in accordance with standards referenced in Table 14-1. [CPC 409.6]

BIDETS

- ☐ The water supply to bidets shall be protected with air gap or vacuum breaker. [CPC 410.2 & 603.3.5]
- ☐ The maximum hot water temperature discharging from a bidet is limited to 110 degrees by a device that conforms to ASSE 1070, Standard for Water Temperature Limiting Devices, or CSA B125.3, Standard for Plumbing Fittings. The water heater thermostat shall not be considered a control for meeting this provision. [CPC 410.3]

SMOKE & CARBON MONOXIDE ALARMS

- ☐ Show location(s) of interconnected hard-wired "SMOKE ALARM" with battery backup in the following: [R314]
  a. In each sleeping room.
  b. Outside of each separate sleeping area in the immediate vicinity of the bedrooms
  c. On each additional story of the dwelling, including basements and habitable attics, but not including crawl spaces and uninhabitable attics.
  d. Provide a note: "SMOKE ALARM shall be interconnected hard-wired with battery backup."
  e. Battery operated ok only where no access for wiring in attic or crawlspace.
- ☐ Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms. [CRC R314.5]
- ☐ For buildings with fuel-burning appliances and/or attached garages, provide an approved CARBON MONOXIDE ALARM at: [R315.1]
  a. Outside of each separate sleeping area in the immediate vicinity of the bedrooms
  b. On every level of a dwelling unit including basements
  c. Provide a note: "CARBON MONOXIDE ALARM shall be interconnected hard-wired with battery backup." [R315.1.3]
  d. Battery operated ok where no access for wiring.
- ☐ Combination carbon monoxide & smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms. [CRC R315.4]

WINDOWS/DOORS

- ☐ Exterior windows/doors added and/or replaced as part of the remodeling project shall be clearly identified on the plans and shall have a fenestration label with U-Factor and Solar Heat Gain Coefficient meeting the requirements of section [CEnC 110.6]
- ☐ Safety glazing is required within 60 inches horizontally of the shower enclosure and within 60 inches vertically of the standing surface.